

#16
D. Williams
Patent 7/13/94

Attorney's Docket No. 010091-001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)	
C. Richard SCHLEGEL)	Group Art Unit: 1813
Application No.: 08/216,506)	Examiner: Unassigned
Filed: March 22, 1994)	
For: PAPILLOMAVIRUS VACCINE)	

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**INFORMATION DISCLOSURE STATEMENT
TRANSMITTAL LETTER**

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

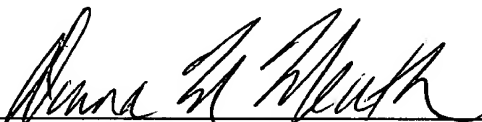
Enclosed is an Information Disclosure Statement and accompanying form PTO-1449 for the above-identified patent application.

- ☒ [X] No additional fee is required.
- ☐ [] The fee of \$200.00 as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- ☐ [] A certification under 37 C.F.R. § 1.97(e) is also enclosed.
- ☐ [] A certification under 37 C.F.R. § 1.97(e), a petition requesting consideration of the information disclosure statement, and the petition fee of \$130.00 as set forth in 37 C.F.R. § 1.17(i) are also enclosed.
- ☐ [] A check in the amount of \$_____ is enclosed.
- ☐ [] Charge \$_____ to Deposit Account No. 02-4800.

The Commissioner is hereby authorized to charge any fees under 37 C.F.R. § 1.17 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in triplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS

By: 

Donna M. Meuth
Registration No. 36,607

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Date: June 3, 1994

INFORMATION DISCLOSURE CITATION PTO-1449		ATTY. DOCKET NO. 010091-001	SERIAL NO. 08/216,506
		APPLICANT C. Richard SCHLEGEL	
		FILING DATE March 22, 1994	GROUP 1813
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
M	<i>"A Quantitative In Vitro Focus Assay for Bovine Papilloma Virus"</i> , Israel Dvoretzky et al., <u>Virology</u> , Vol. 103, pp. 369-375, 1980.		
M	<i>"Expression of Vaccinia Recombinant HPV 16 L1 and L2 ORF Proteins in Epithelial Cells Is Sufficient for Assembly of HPV Virion-Like Particles"</i> , Jian Zhou et al., <u>Virology</u> , Vol. 185, pp. 251-257, 1991.		
M	<i>"Effective Vaccination Against Papilloma Development by Immunization with L1 or L2 Structural Protein of Cottontail Rabbit Papillomavirus"</i> , Yi-Ling Lin et al., <u>Virology</u> , Vol. 187, pp. 612-619, 1992.		
M	<i>"HPV-1 L1 Protein Expressed in COS Cells Displays Conformational Epitopes Found on Intact Virions"</i> , Shin-Je Ghim et al., <u>Virology</u> , Vol. 190, pp. 548-552, 1992.		
M	<i>"Analysis of the L1 Gene Product of Human Papillomavirus Type 16 by Expression in a Vaccinia Virus Recombinant"</i> , Helena M. Browne et al., <u>The Journal of General Virology</u> , Vol. 69, Part 6, pp. 1263-1273, 1988.		
M	<i>"Increased Antibody Responses to Human Papillomavirus Type 16 L1 Protein Expressed by Recombinant Vaccinia Virus Lacking Serine Protease Inhibitor Genes"</i> , Jian Zhou et al., <u>The Journal of General Virology</u> , Vol. 71, Part 9, pp. 2185-2190, 1990.		
M	<i>"Papillomavirus L1 Major Capsid Protein Self-Assembles into Virus-Like Particles that are Highly Immunogenic"</i> , R. Kirnbauer et al., <u>Proc. Natl. Acad. Sci. USA</u> , Vol. 89, pp. 12180-12184, December 1992.		
M	<i>"Expression of Human Papillomavirus Type 11 L1 Protein in Insect Cells: In Vivo and In Vitro Assembly of Viruslike Particles"</i> , Robert C. Rose et al., <u>Journal of Virology</u> , Vol. 67, No. 4, pp. 1936-1944, April 1993.		
M	<i>"Synthesis and Assembly of Infectious Bovine Papillomavirus Particles In Vitro"</i> , Jian Zhou et al., <u>The Journal of General Virology</u> , Vol. 74, pp. 763-768, 1993.		
M	<i>"Comparison of Human Papillomavirus Type 1 Serotyping by Monoclonal Antibodies with Genotyping by in situ Hybridization of Plantar Warts"</i> , Jenson et al., <u>J. Cutan Pathol.</u> , Vol. 16, pp. 54-59, 1989.		
	<i>"Identification of Conformational Epitopes of the BPV-1 Capsid Recognized by Competitive Inhibition of Sera From Infected or Immunized Animals"</i> , Shin-je Ghim et al., <u>Pathobiology</u> , Vol. 61, pp. 138-144, 1993.		
EXAMINER		DATE CONSIDERED	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)
C. Richard SCHLEGEL) Group Art Unit: 1813
Application No.: 08/216,506) Examiner: Unassigned
Filed: March 22, 1994)
For: PAPILLOMAVIRUS VACCINE)

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INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. §1.56, Applicant hereby submits the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98. A copy of each of the documents cited below is enclosed. The submission of these references should not be considered to be an admission that any of these references constitute prior art to the claimed invention.

References:

"A *Quantitative In Vitro Focus Assay for Bovine Papilloma Virus*", Israel Dvoretzky et al., *Virology*, Vol. 103, pp. 369-375, 1980.

"*Expression of Vaccinia Recombinant HPV 16 L1 and L2 ORF Proteins in Epithelial Cells Is Sufficient for Assembly of HPV Virion-Like Particles*", Jian Zhou et al., *Virology*, Vol. 185, pp. 251-257, 1991.

"*Effective Vaccination Against Papilloma Development by Immunization with L1 or L2 Structural Protein of Cottontail Rabbit Papillomavirus*", Yi-Ling Lin et al., *Virology*, Vol. 187, pp. 612-619, 1992.

"*HPV-1 L1 Protein Expressed in COS Cells Displays Conformational Epitopes Found on Intact Virions*", Shin-Je Ghim et al., *Virology*, Vol. 190, pp. 548-552, 1992.

"Analysis of the L1 Gene Product of Human Papillomavirus Type 16 by Expression in a Vaccinia Virus Recombinant", Helena M. Browne et al., The Journal of General Virology, Vol. 69, Part 6, pp. 1263-1273, 1988.

"Increased Antibody Responses to Human Papillomavirus Type 16 L1 Protein Expressed by Recombinant Vaccinia Virus Lacking Serine Protease Inhibitor Genes", Jian Zhou et al., The Journal of General Virology, Vol. 71, Part 9, pp. 2185-2190, 1990.

"Papillomavirus L1 Major Capsid Protein Self-Assembles into Virus-Like Particles that are Highly Immunogenic", R. Kirnbauer et al., Proc. Natl. Acad. Sci. USA, Vol. 89, pp. 12180-12184, December 1992.

"Expression of Human Papillomavirus Type 11 L1 Protein in Insect Cells: In Vivo and In Vitro Assembly of Viruslike Particles", Robert C. Rose et al., Journal of Virology, Vol. 67, No. 4, pp. 1936-1944, April 1993.

"Synthesis and Assembly of Infectious Bovine Papillomavirus Particles In Vitro", Jian Zhou et al., The Journal of General Virology, Vol. 74, pp. 763-768, 1993.

"Comparison of Human Papillomavirus Type 1 Serotyping by Monoclonal Antibodies with Genotyping by in situ Hybridization of Plantar Warts", Jenson et al., J. Cutan Pathol., Vol. 16, pp. 54-59, 1989.

"Identification of Conformational Epitopes of the BPV-1 Capsid Recognized by Competitive Inhibition of Sera From Infected or Immunized Animals", Shin-je Ghim et al., Pathobiology, Vol. 61, pp. 138-144, 1993.

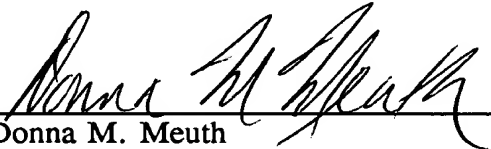
To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an initialled copy of this form be returned to the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS

Date: June 4, 1994

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